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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/643,740

08/18/2003

Stephan Kurt Gipp

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08/10/2007

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EXAMINER

TO, JENNIFER N

ART UNIT

PAPER NUMBER

2195

MAIL DATE

DELIVERY MODE

08/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/643,740

Applicant(s)

GIPP, STEPHAN KURT

Examiner

Jennifer N. To

Art Unit

2195

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/21/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-29 are presenting for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 17-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. Claims 17-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are directed to a signal directly or indirectly by claiming a medium and the Specification recites evidence where the computer readable medium is define as a "**wave**" (such as a carrier wave, see specification page 4, lines 15-24). In that event, the claims are directed to a form of energy, which at present the office feels does not fall into a category of invention. The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-6, and 17-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

7. As per claims 1 and 17, line 2, recited the limitation of "creating in a computer system consumer a resource consumer". However, this limitation was not support or described in the specification. According to the specification page 2, lines 4-6, disclosed, "creating in a computer system a resource consumer". The fact that a resource consumer being created in a computer system does not mean or explain, describe that the computer system is a consumer computer system as disclosed in the claim limitation. Thus, The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

9. Claims 1-6, and 17-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The claim language in the following claims is not clearly understood:

- i. as per claim 1, line 2, it is not clearly understood what is meant by "a computer system consumer" (i.e. a consumer computer system).
- ii. as per claim 2, lines 1-2, it is not clearly understood what is mean by "the field is stored in the resource consumer".
- iii. as per claims 17-18, they have the same deficiency as claims 1-2.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-5, and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over NAS ("NAS Origin2000 Configuration For Batch Job Execution", March 2000, pages 1-7), and in view of Krueger et al. (hereafter Krueger) (U.S. Patent NO. 6247041).

12. NAS was cited in IDS filed 08/21/2006.

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13. As per claim 1, NAS teaches the invention substantially as claim including a method comprising:

determining whether the resource consumer is limited to receiving resources from a certain one of a set of resource providers, wherein each of the set of resource providers has one of the set of flavors (pages 2-4, OS support for resource management section, job scheduling and resource allocation policy section, support for dynamic creation of cpuset for each job section, the set of flavors referred here are the cpuset which process can be bound to carried a certain characteristics);

if the resource consumer is limited to receiving resources from the certain one of the set of resource providers, marking a field to indicate that the resource consumer is limited to receiving resources from the certain one of the set of resource providers (page 2, OS support for resource management section); and

allocating a resource to the resource consumer from one of the set of resource providers whose flavor matches the flavor assigned to the resource consumer (pages 3-4, job scheduling and resource allocation policy section).

14. NAS did not specifically teach creating a resource consumer, and assigning the resource consumer one of a set of flavors.

15. However, Krueger teaches creating a resource consumer, and assigning the resource consumer one of a set of flavors. (fig. 6; abstract; col. 2, lines 51-57).

16. It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have combined the teaching of NAS and Krueger because the combined of Krueger teaching creating a resource consumer, and assigning the resource consumer one of a set of flavors, and NAS teaching of allocating resources to resource consumer based on the satisfactory of the resource consumer request (i.e. matching the requested flavor of resource consumer with the resource providers) would improve the integrity of the overall system by allowing user to control or advise the operating system what resources the process (resource consumer) need to use/access (Krueger, col. 2, lines 36-37).

17. As per claim 2, NAS teaches that wherein the field is stored in the resource consumer (page 2, OS support for resource management section).

18. As per claim 3, NAS teaches that wherein in the resource is physical memory (page 1, hardware configuration and layout section).

19. As per claim 4, NAS teaches that wherein the resource is one or more central processing units (page 1, hardware configuration and layout section).

20. As per claim 5, NAS teaches that wherein the set of flavors includes application, support, and operating system (pages 2-4, OS support for resource management section, support for dynamic creation of cpuset for each job section).

21. As per claims 17-21, they are rejected for the same reason as claims 1-5 above.

Claim Rejections - 35 USC § 102

22. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

23. Claims 6-16, and 22-29 are rejected under 35 U.S.C. 102(b) as being anticipated by NAS ("NAS Origin2000 Configuration For Batch Job Execution", March 2000, pages 1-7).

24. NAS was cited in IDS filed 08/21/2006.

25. As per claim 6, NAS teaches the invention as claim including a method comprising:

receiving a request for a resource from a resource consumer, wherein the resource consumer has a first flavor (pages 2-4, OS support for resource management section, job scheduling and resource allocation policy section, support for dynamic creation of cpuset for each job section, the set of flavors referred here are the cpuset which process can be bound to carried a certain characteristics);

determining whether the first flavor matches a second flavor of one of a set of nodes (pages 2-4; OS support for resource management section, job scheduling and

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resource allocation policy section, support for dynamic creation of cpuset for each job section);

if the first flavor matches the second flavor, determining whether the resource is available in the one of the set of nodes (pages 2-4, OS support for resource management section, job scheduling and resource allocation policy section, support for dynamic creation of cpuset for each job section); and

if the resource is available in the one of the set of nodes, allocating the resource to the resource consumer (page 3, job scheduling and resource allocation policy section).

26. As per claim 7, NAS teaches that wherein the resource consumer has a place field, wherein the place field indicates that the resource consumer can only receive resources from a certain one of the set of nodes, wherein each of the set of nodes has a node identifier, and wherein the method further includes determining whether the place field of the resource consumer matches the node identifier of the one of the set of nodes (pages 2-4, OS support for resource management section, job scheduling and resource allocation policy section, support for dynamic creation of cpuset for each job section).

27. As per claim 8, NAS teaches that wherein the resource is a CPU (pages 2-3, OS support for resource management section).

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28. As per claim 9, NAS teaches that wherein the resource is physical memory (page 1, hardware configuration and layout section).

29. As per claim 10, NAS teaches that wherein the resource consumer is a process or a thread (pages 2-3, OS support for resource management section).

30. As per claim 11, NAS teaches the invention as claim including a method comprising:

requesting a resource from a set of one or more resource providers, wherein each one of the set of resource providers includes one of a set of flavors, wherein the set of flavors includes an operating system flavor, a support flavor, and an application flavor, and wherein each one of the set of resource providers is a node(pages 2-4, OS support for resource management section, job scheduling and resource allocation policy section, support for dynamic creation of cpuset for each job section) ; and

accepting the resource from one of the set of resource providers (page 3, job scheduling and resource allocation policy section).

31. As per claim 12-13, they are rejected for the same reason as claims 8-9 above.

32. As per claim 14, NAS teaches the invention as claim including an apparatus comprising:

a first set of one or more nodes, wherein each of the set of nodes includes, a second set of one or more central processing units (CPUs) (page 1, hardware configuration and layout section); and

a physical memory communicatively coupled to each CPU of the second set, wherein the physical memory includes a first flavor of the node, wherein the physical memory includes an operating system, and wherein the operating system is to allocate CPUs of the second set and the physical memory to resource consumers that have a second flavor that matches the first flavor (pages 1-4, hardware configuration and layout section, OS support for resource management section, job scheduling and resource allocation policy section, support for dynamic creation of cpuset for each job section).

33. As per claims 15-16, they are rejected for the same reason as claims 10-11 above.

34. As per claims 22-29, they are rejected for the same reason as claims 6-13 above.

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Raja et al. (U.S. Patent No. 7058947), Sankaranarayan et al. (U.S. Patent No. 7111297), Sankaranarayan et al. (U.S. Patent No. 7137119), Waddington (U.S. Patent

No. 7219347), Camillone et al. (U.S. Patent No. 5421011), Wilson et al. (U.S. Patent No. 6763454), Stone et al. (U.S. Patent No. 7069558), and Heyrman et al. (U.S. Patent No. 7222343) teach system and method for managing resources based on policy and rule.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer N. To whose telephone number is (571) 272-7212. The examiner can normally be reached on M-T 6AM- 3:30 PM, F 6AM- 2:30 PM.

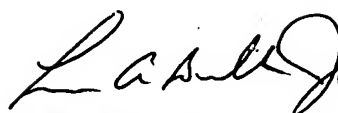
37. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

38. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Jennifer N. To
Examiner
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A handwritten signature in black ink, appearing to read "L. Bullock, Jr.", written in a cursive style.

LEWIS A. BULLOCK, JR.
PRIMARY EXAMINER